

## Details



**Completion Time:** About one period

**Permission:** Download and Share

## Arctic Animals: How do they measure up?

### Overview

This lesson is intended to have the students think about the animals of the Arctic and which ones they think are the largest. This will help with misconceptions of some animals being smaller than they think and you sneak in the scientific method and measuring skills while doing this lesson. Students will love actively participating and comparing themselves to see where they measure up.

### Objective

- Students will be able to organize Arctic animals from the smallest to largest in length.
- Students will understand the basics of inches and feet.
- Students will learn to use tools (measuring tape) for scientific exploration.

### Lesson Preparation

Be sure to have made enough sets of the animal cards to have enough for each group based on your class size (Hint: printout as a handout for smaller sizes). For the preK-K, print out one set of the slides, so the entire class can put them in order on the board or hung on a wall.

Prior to the lesson, a good introduction to Arctic animals would be to watch a video or have a few books on the Arctic to read to your class. Students should have also been introduced to a lesson on measuring in inches and feet.

### Procedure

1. Divide the class into groups based on how many sets of animal photos you have.
2. Have them try to put them in a row from smallest to largest. For older students, have them write down guesses of how long they think each animal is onto a piece of paper.
3. Choose a large location or move desks to one side of the classroom to begin to do the true measurements for

## Materials

- Photo cards of animals (attached)
- List of lengths of animals (attached)
- Surveyor's Tape measure or measuring tape (at least 50ft)
- Masking Tape/ Marker
- For younger students- stuffed animals

each animal. Outside is also a great option.

4. If you have enough measuring tapes, each group can begin to make measurements of the animals and also record each member's length. If not letting each group do their own measurements, have each mark a few of the animal's lengths will work. Be sure to have them write the name of the animal or classmate on the masking tape and place it at the right location.

5. Be sure to have a discussion about what they thought was the longest and what animal really was the longest. Compare/Contrast similar animals and also where each of them measured up among their classmates.

### **Extension**

An extension for an older group would be to take the measurements of each classmate's height and make a graph. This would reinforce graphing and math skills. Students could also search for the lengths of other animals and compare or choose a new biome and compare its animals with the Arctic's.

### **Resources**

N/A

### **Assessment**

Student understanding can be seen through the activity of the lesson. A great follow-up would be a quiz on measuring. Older students could make their own graphs of their results and younger students could return to the classroom and correct their original hypothesis of the sequence of animals from smallest to largest.

### **Credits**

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**National Science Education Standards (NSES):**

**Content Standards, Grades K-4**

Content Standard A: Science As Inquiry

- a. Abilities necessary to do scientific inquiry
- b. Understandings about scientific inquiry

Content Standard C: Life Science

- a. Characteristics of organisms
- c. Organisms and environments

**Content Standards, Grades 5-8**

Content Standard A: Science As Inquiry

- a. Abilities necessary to do scientific inquiry
- b. Understandings about scientific inquiry

Content Standard C: Life Science

- a. Structure and function in living systems
- e. Diversity and adaptations of organisms

**Other Standards**

N/A

## Arctic Animals: How do they measure up?

Killer Whale- 30 ft

Ribbon Seal- 4ft 10 inches

Polar Bear- 10 ft

Beluga- 15 ft

Walrus- 12 ft

Arctic Fox- 2 ft

Bearded Seal- 8 ft 8 inches

Spotted Seal- 67 inches

Bald Eagle- length: 32 inches; wingspan: 80 inches



**Bearded Seal**

***Erignathus barbatus***



**Beluga Whale**

*Delphinapterus leucas*



Polar Bear

*Ursus maritimus*



**Walrus**

*Odobenus rosmarus*





**Ribbon Seal**

*Histriophoca fasciata*



**Spotted Seal**  
*Phoca largha*



Killer Whale  
*Orcinus orca*



**Bald Eagle**

*Haliaeetus leucocephalus*



Arctic Fox  
*Alopex lagopus*